


Cybersecurity Professional Program

Exam Review

Introduction to Python for Security





Exam Review Objectives

The objective of the lesson is to practice answering questions on topics learned in the course to prepare for the final exam.

- Content and Sample Questions



Exam Review

Content and Sample Questions



Content and Sample Questions

Introduction to Programming

Introduction to Programming


Python Installation

Python IDE

Python Env. and PyCharm

Basic Syntax





Content and Sample Questions


Question 1

The code is read from left to right and top to bottom while checking and executing each line in the process. Which of the following actions was performed?

- A. Interpretation
- B. Compilation
- C. Encapsulation
- D. Debugging

Content and Sample Questions

Question 2



What will happen when the following code is executed?

```
if True:  
    print("Hello")
```

- A. It will print the word *Hello*.
- B. It will not run because *if* was not invoked.
- C. It will not run because it cannot understand *True*.
- D. It will display an indentation error.



Content and Sample Questions

Data Types and Conditions


Variables and User Input

Arithmetic and Casting

Conditions

Advanced Data Structures





Content and Sample Questions

Question 3

What will the value of ***X*** be?

X = 10

if True and False:


X += 10

print(X)

- A. 20
- B. 10
- C. The code is erroneous.
- D. X cannot be a variable.

Loops

Content and Sample Questions




For and While

Loops and Conditions




Content and Sample Questions

Question 4



Which of the following should be used to iterate over a list and print its items separately?

- A. While loop
- B. For loop
- C. If condition
- D. Dictionary



Content and Sample Questions

Question 5

What will be the output of the following code?

```
counter = 0  
for i in range(0, 10, 4):  
    break  
    counter += 1  
print(counter)
```

- A. 10
- B. 2
- C. 3
- D. 0



Content and Sample Questions

File System and Error Handling

Error Handling

File Permissions

Module Definition and Usage

System Modules

Log Parsing






Content and Sample Questions

Question 6

What will happen when you run the following code?

```
with open("MyFile.txt", "w") as file:  
file.write("Hello World")
```

- A. "Hello World" will be appended to the file.
- B. An error will occur because "w" allows reading the file.
- C. The file will be overwritten with "Hello World".
- D. An error will occur because an exception was not added.



Content and Sample Questions

Functions

Introduction to Functions

Code Handling

Recursion

Object-Oriented Programming




Content and Sample Questions

Question 7

What is the purpose of the following expression:

If `__name__ == "__main__"`

- A. To check the name of the file
- B. To ensure the first function in the file is executed
- C. To check if the file is the main file in the project
- D. To check if the file is imported or directly executed



Content and Sample Questions

Question 8

What should be added to the following function to print the value 20?

```
x = 10  
def func():  
    x = 20  
  
func()  
print(x)
```

- A. The command `global x`
- B. The command `main x`
- C. The command `self x`
- D. The command `pass x`



Content and Sample Questions

Network Communication

Creating a Client Socket

Creating a Server Socket

Sending Data

Echo Communication

Exercise: Home Project





Content and Sample Questions


Question 9

When sending text via the socket library to a server, why should the text be encoded?

- A. The data must be encoded to ASCII.
- B. The data must be encoded with SHA.
- C. It must be passed as a byte object.
- D. Because it is code

Content and Sample Questions

Question 10



When creating client-server communication scripts, which one should be executed first?

- A. Both must be executed at the same time.
- B. The client
- C. It does not matter.
- D. The server



Thank You

Questions?